

**THAT WHICH IS CLAIMED IS:**

1. A method of making a keratinase, comprising:
  - (a) culturing a recombinant *Bacillus* in a media, said recombinant *Bacillus* having at least one heterologous *kerA* coding segment inserted into the chromosome thereof, with said recombinant *Bacillus* producing greater quantities of keratinase than a corresponding wild-type *Bacillus* that does not have said at least one heterologous *kerA* coding segment inserted into the genome thereof; and then
  - (b) collecting said keratinase from said media.
2. The method of claim 1, wherein said media comprises not more than 3% protein substrate.
3. The method of claim 1, wherein said media comprises 1% soy and 1% feather meal.
4. The method of claim 1, wherein said *Bacillus* is selected from the group consisting of *Bacillus licheniformis* and *Bacillus subtilis*.
5. The method of claim 1, wherein said *Bacillus* is *Bacillus licheniformis*.
6. The method of claim 1, wherein said *kerA* coding segment is a *Bacillus licheniformis* or *Bacillus subtilis* *kerA* coding segment.
7. The method of claim 1, wherein said *kerA* coding segment is a *Bacillus licheniformis* *kerA* coding segment.
8. The method of claim 1, wherein said corresponding wild-type *Bacillus* is *Bacillus licheniformis* PWD-1.
9. The method of claim 1, said recombinant *Bacillus* having a plurality of said heterologous *kerA* coding segment inserted into the chromosome thereof.
10. The method of claim 1, said recombinant *Bacillus* having from 3 to 5 of said heterologous *kerA* coding segment inserted into the chromosome thereof.

11. The method of claim 1, wherein said recombinant *Bacillus* is a protease-deficient *Bacillus*.
12. The method of claim 1, wherein said *kerA* coding segment is operatively associated with a constitutive promoter.
13. The method of claim 1, wherein said *kerA* coding segment is operatively associated with a P43 promoter.
14. A recombinant *Bacillus* having at least one heterologous *kerA* coding segment inserted into the chromosome thereof, with said recombinant *Bacillus* producing greater quantities of keratinase than a corresponding wild-type *Bacillus* that does not have said at least one heterologous *kerA* coding segment inserted into the genome thereof.
15. The recombinant *Bacillus* of claim 14, wherein said *Bacillus* is selected from the group consisting of *Bacillus licheniformis* and *Bacillus subtilis*.
16. The recombinant *Bacillus* of claim 14, wherein said *Bacillus* is *Bacillus licheniformis*.
17. The recombinant *Bacillus* of claim 14, wherein said *kerA* coding segment is a *Bacillus licheniformis* or *Bacillus subtilis* *kerA* coding segment.
18. The recombinant *Bacillus* of claim 14, wherein said *kerA* coding segment is a *Bacillus licheniformis* *kerA* coding segment.
19. The recombinant *Bacillus* of claim 14, wherein said corresponding wild-type *Bacillus* is *Bacillus licheniformis* PWD-1.
20. The recombinant *Bacillus* of claim 14 having a plurality of said heterologous *kerA* coding segment inserted into the chromosome thereof.

21. The recombinant *Bacillus* of claim 14 having from 3 to 5 of said heterologous *kerA* coding segment inserted into the chromosome thereof.

22. The recombinant *Bacillus* of claim 14, wherein said recombinant *Bacillus* is a protease-deficient *Bacillus*.

23. The recombinant *Bacillus* of claim 14, wherein said *kerA* coding segment is operatively associated with a constitutive promoter.

24. The recombinant *Bacillus* of claim 14, wherein said *kerA* coding segment is operatively associated with a P43 promoter.

25. A bacterial culture comprising a recombinant *Bacillus* of claim 14 in a culture media.

26. The bacterial culture of claim 25, wherein said culture media comprises not more than 3% protein substrate.

27. The bacterial culture of claim 25, wherein said culture media comprises 1% soy and 1% feather meal.

28. A method of making a recombinant *Bacillus* of claim 14, comprising the steps of:  
(a) inserting a *kerA* coding segment into an integrative *Bacillus* expression vector, said *kerA* operatively associated with a promoter, said promoter operative in *Bacillus* bacteria; and then

(b) transforming a *Bacillus* with said integrative *Bacillus* expression vector.

29. The method of claim 28, wherein said integrative *Bacillus* expression vector includes alpha-amylase 5'- and 3'-flanking DNA segments, and wherein said *kerA* coding segment is inserted between said alpha amylase 5'- and 3'-flanking segments.

30. The method of claim 28, wherein said integrative *Bacillus* expression vector is pLAT10.